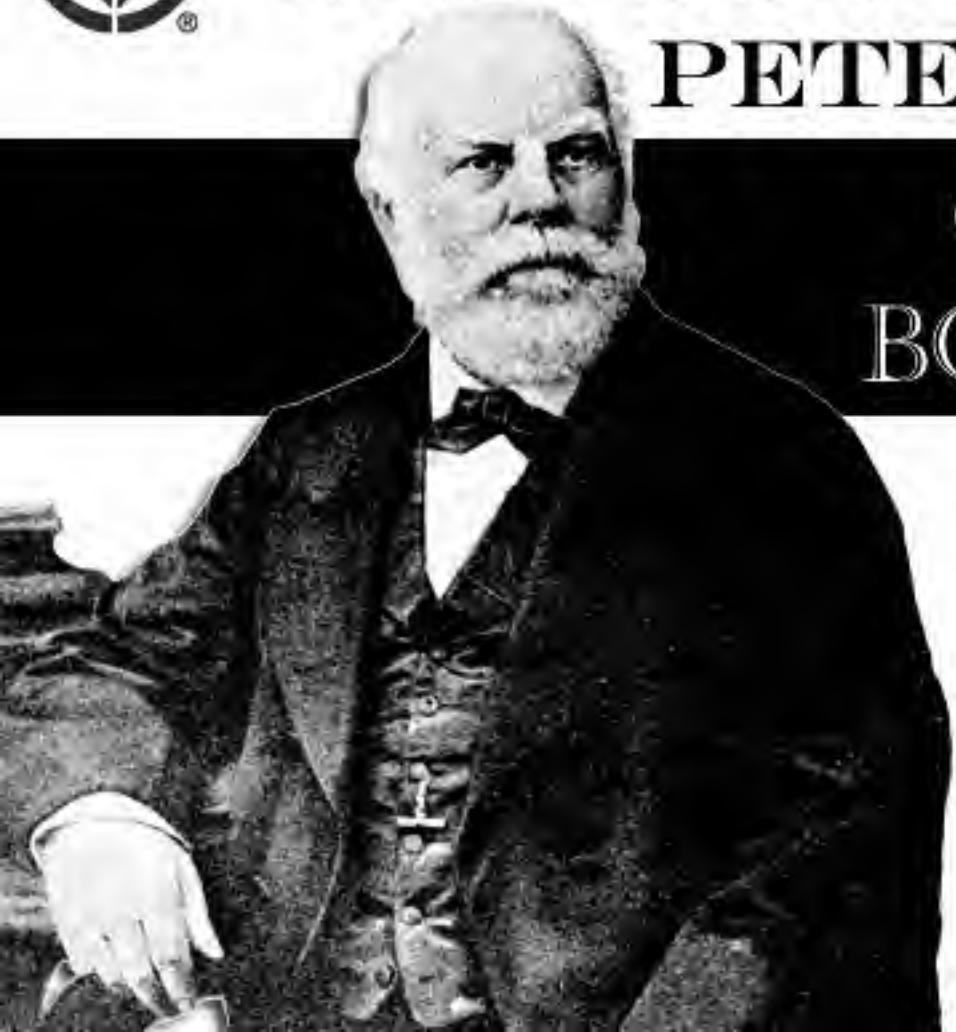




# MISSOURI BOTANICAL GARDEN

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## GEORGE ENGELMANN BOTANICAL NOTEBOOKS

*Pagination Note:*  
*Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.*

Colorado 1884

*Mesaflix multiflora* seed mostly suborbicular

2 lines long; wide wing ( $\frac{1}{3}$  to  $\frac{1}{4}$  the  
width of the seed body)

tubercles <sup>irregular</sup> - seed surrounded by a  
narrow or pointed rim

(in pl. Wright 213 only 1.3 lines)

(in pl. Mex. Gray. 50 x 101 wing half as wide as  
seed - tubercles oval, not ~~rounded~~, not ~~marked~~ on edge)



M.

*M. needea* seed same size and shape

tubercles <sup>irregular</sup> surrounded by a low ridge  
marking the cell divisions



in the Las Vegas plant the tubercles are = multiflora

in tubercles narrow & so.



0 1 2 3 4 5 6 7 8 9 10

cm

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3626

( CIRCULAR.)

# *California Academy*

---

The Council of the California Academy of Sciences  
inform the societies corresponding and exchanging with  
have prevented their printing the Proceedings of this

During the commercial depression which has persisted  
or seven years, the Academy has keenly felt the loss  
in endeavoring to keep alive the interest of its members  
keep open its museum to investigators and visitors, in  
ness.

It was impracticable to publish the proceedings  
the members have persevered in their work, and



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cm

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*Mentzelia triangularis* small flowered  
Flowers 6" diam yellow, open in Morning  
and continue petals as larger leaves turn sharply  
15 stamens. ♀ 3 Sept 26 1888



0 1 2 3 4 5 6 7 8 9 10

cm

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~~Sigillaria~~ ~~Magnolia~~ ~~Grindelia~~  
~~3697~~ ~~Spicata~~ ~~May 1910~~  
~~3698~~ ~~Bark~~ ~~Grindelia~~ ~~Drop~~  
~~F 10 ft. 3 yrs old~~ ~~July 1910~~



0 1 2 3 4 5 6 7 8 9 10

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*Mentzelia* seeds  $\times 10$  probably nuda Febr 28 1882

$\times 10$   
*nudata*



yellow  
ute Pass

*nuda*



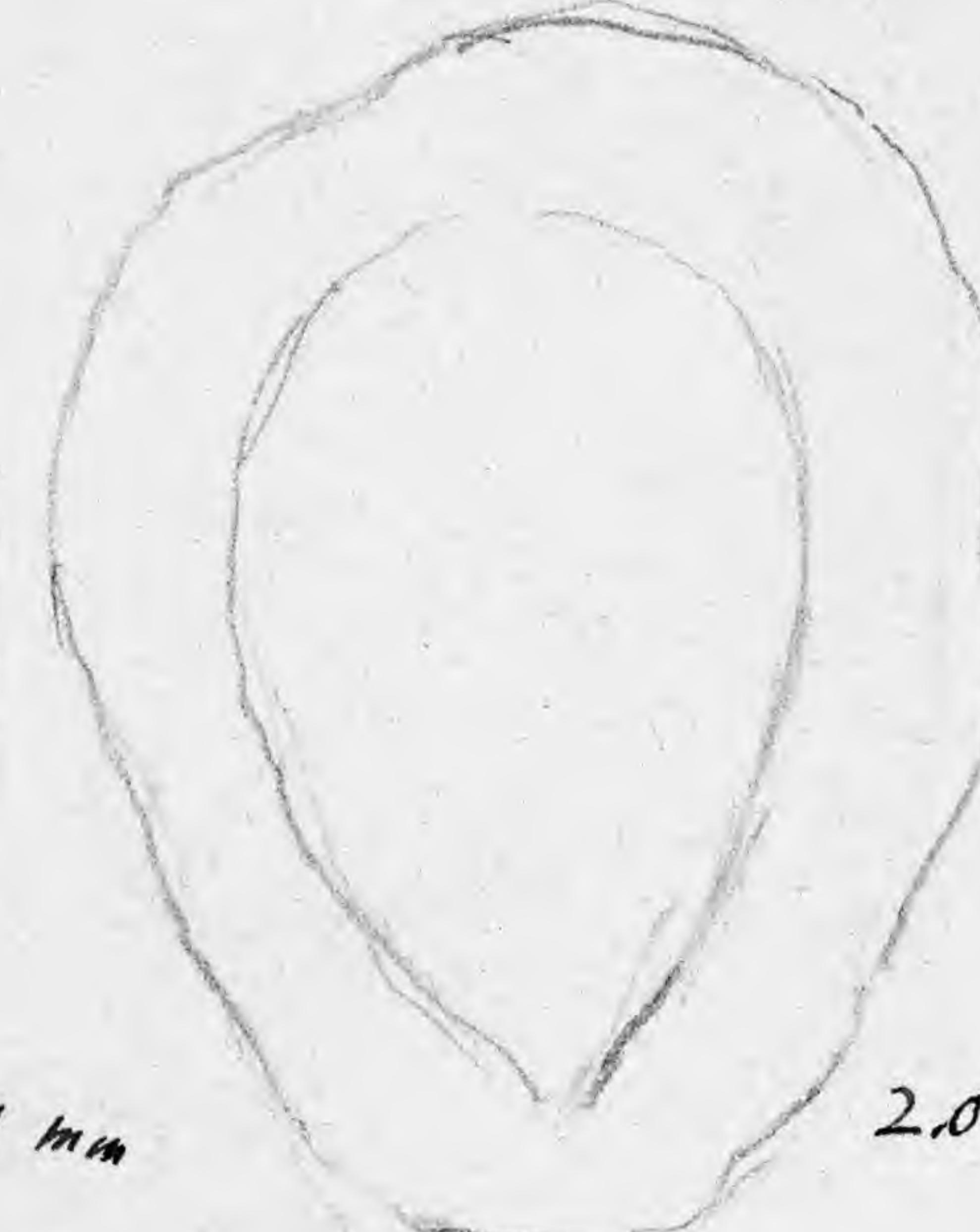
1.3 mm

*miltiflora*



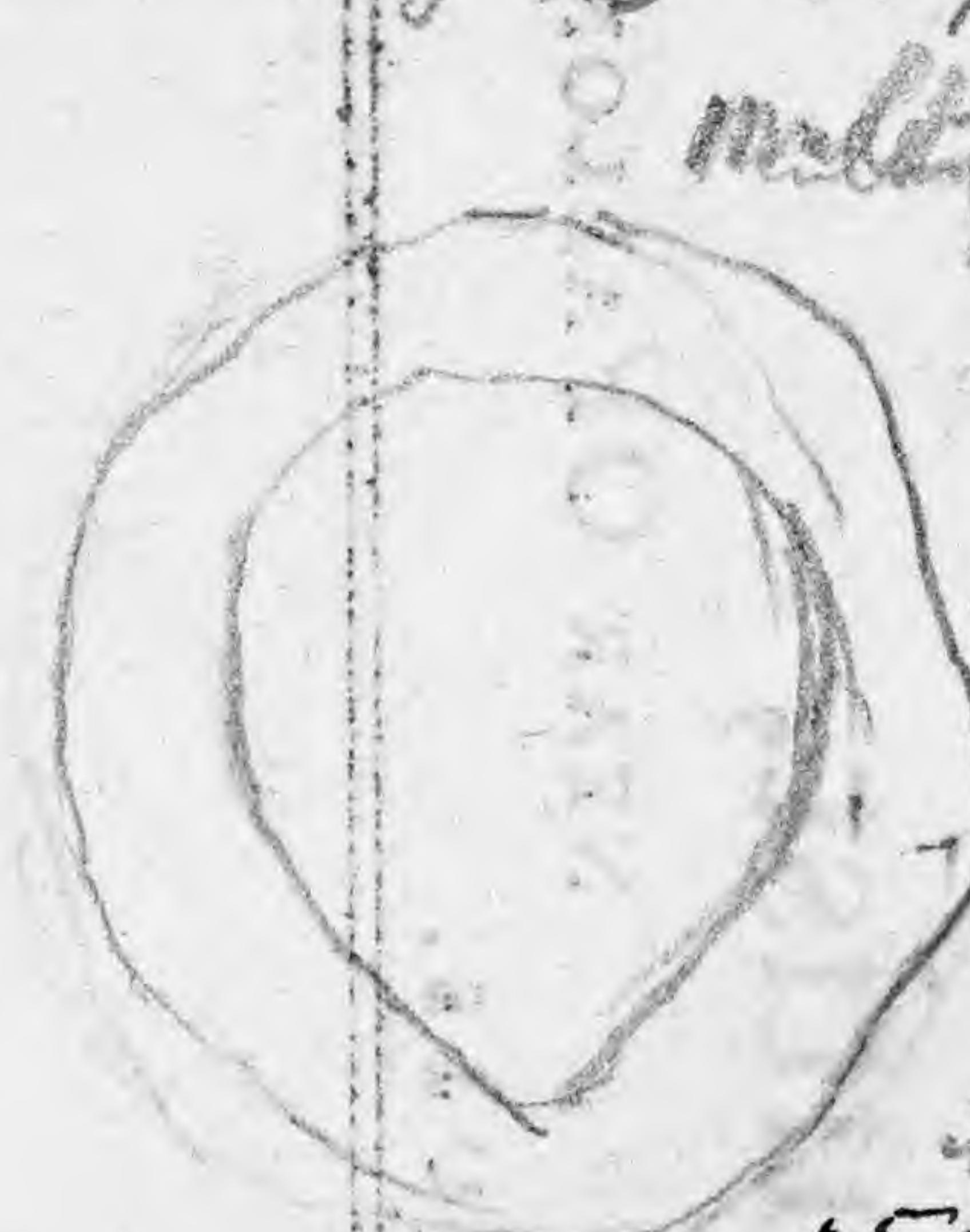
2.1 mm

*miltiflora*



2.0 mm

$\times 10$   
*miltiflora*



1.5 mm

Grape Creek  
1874  
is the same

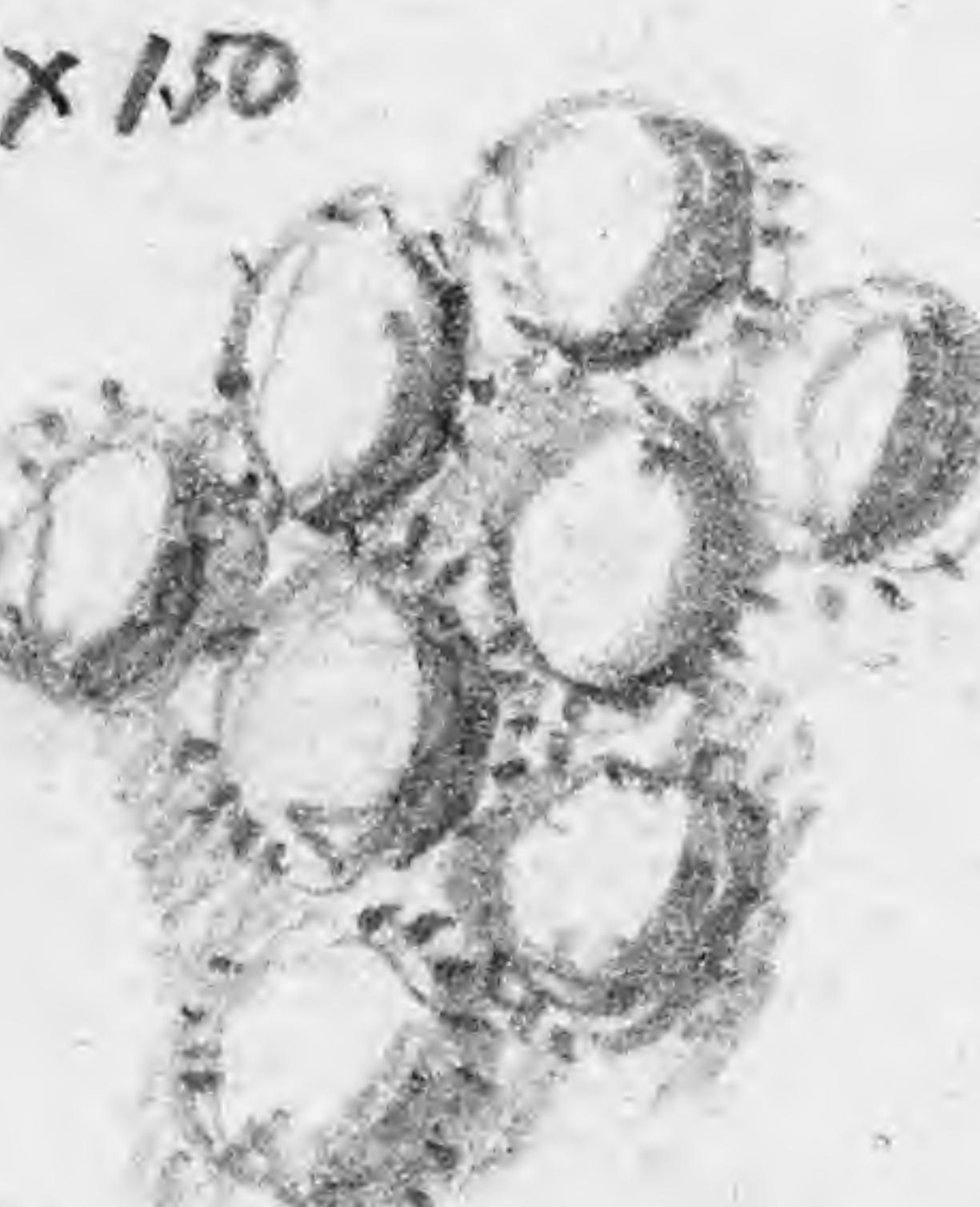
1.5 mm

Grape Creek  
Canon City  
1881

$\times 150$



$\times 150$



$\times 150$

surface of seed

$\times 150$



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cm

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Pharmacist,

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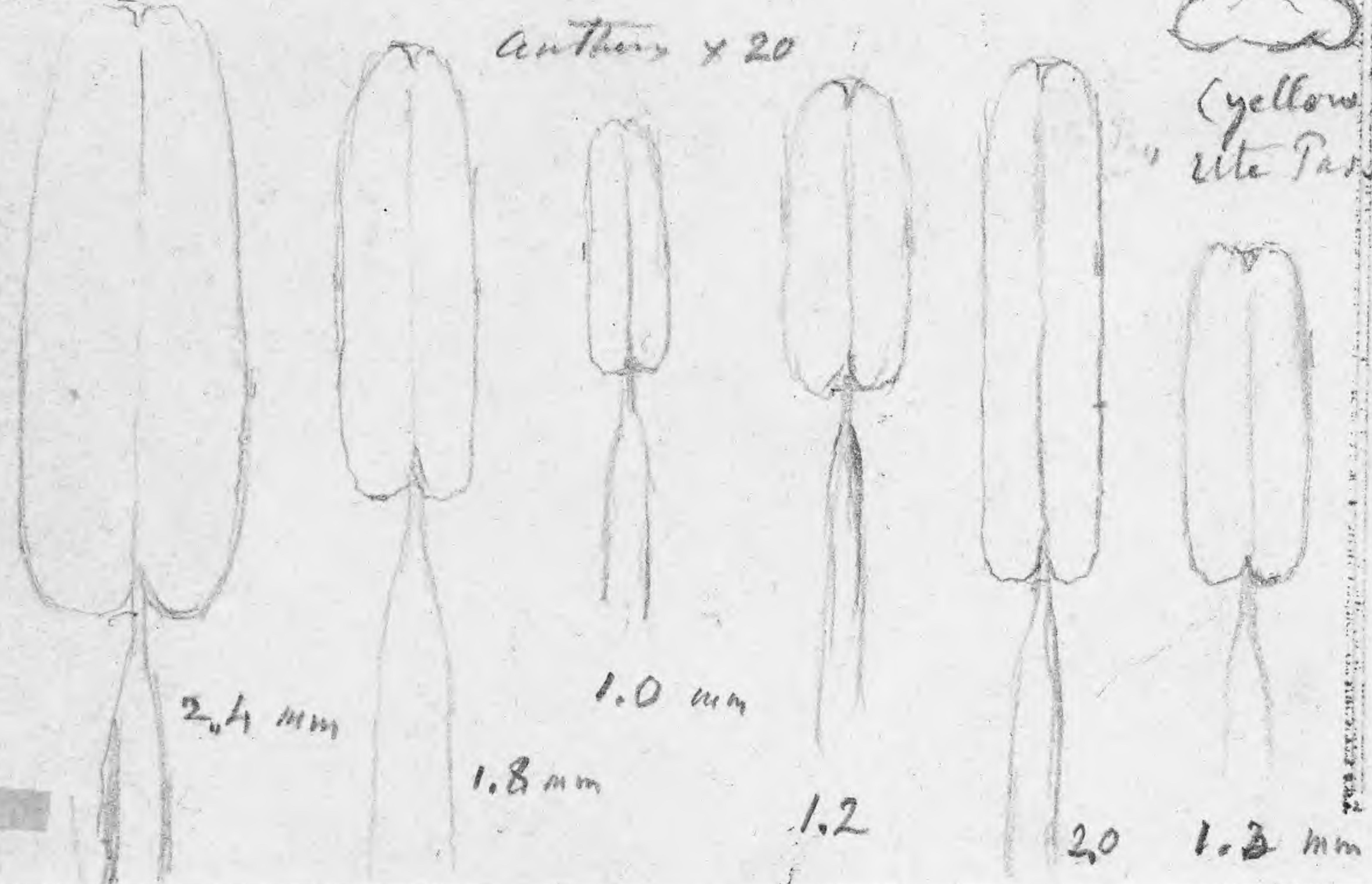
*Meghalia* Pollen  $\times 415$   
 ornata nuda multiflor  
 0.040 0.045 0.029 0.034  


*Musiflora* n.sp. Pollen  $\times 415$  October 28 1882  
 nuda multiflor 0.029 0.034 0.033 mm  


Pueblo Mississ. Hot Springs grape Creek Las Vegas (white)  
 Canon City Canon Mts Pass

anthers

Anthers  $\times 20$



most of the  
 Pollen grains do  
 not develop in water,  
 but this yellow one  
 did frequently  
 into a tetrahedron



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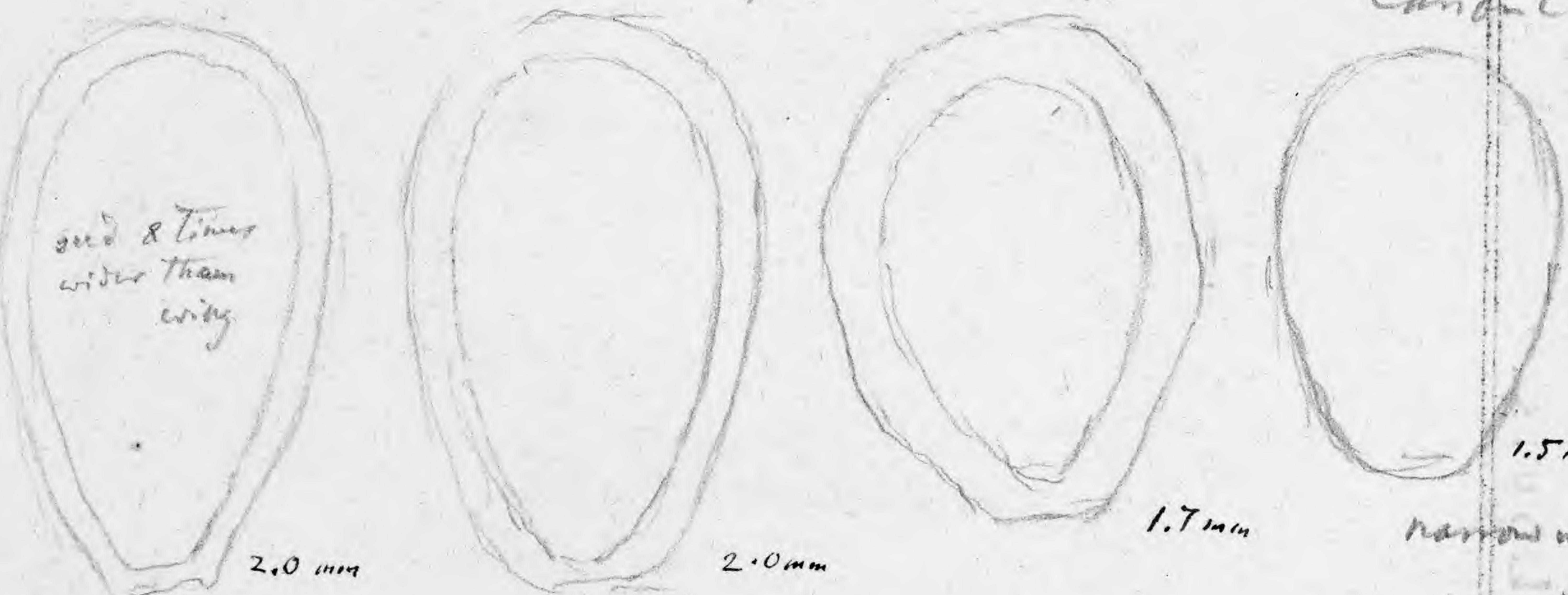
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*ornata*  
*Paebla*

Menzel's seeds  $\times 10$   
undiluted w/ 5% laevigata  
white water, Cal

March 1<sup>st</sup> 1882

*chrysanthia*  
Condon City



$\times 150$



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*Mengelcia*

March 1<sup>st</sup> 1882

*wundata*  
nsp.

0.043



White water  
Calif

*leucandra*

0.042



Calif 1880

*triangularis*

0.036



Calif.

*chrysanthra*

0.026



Cedar City  
Utah 1874

0.027



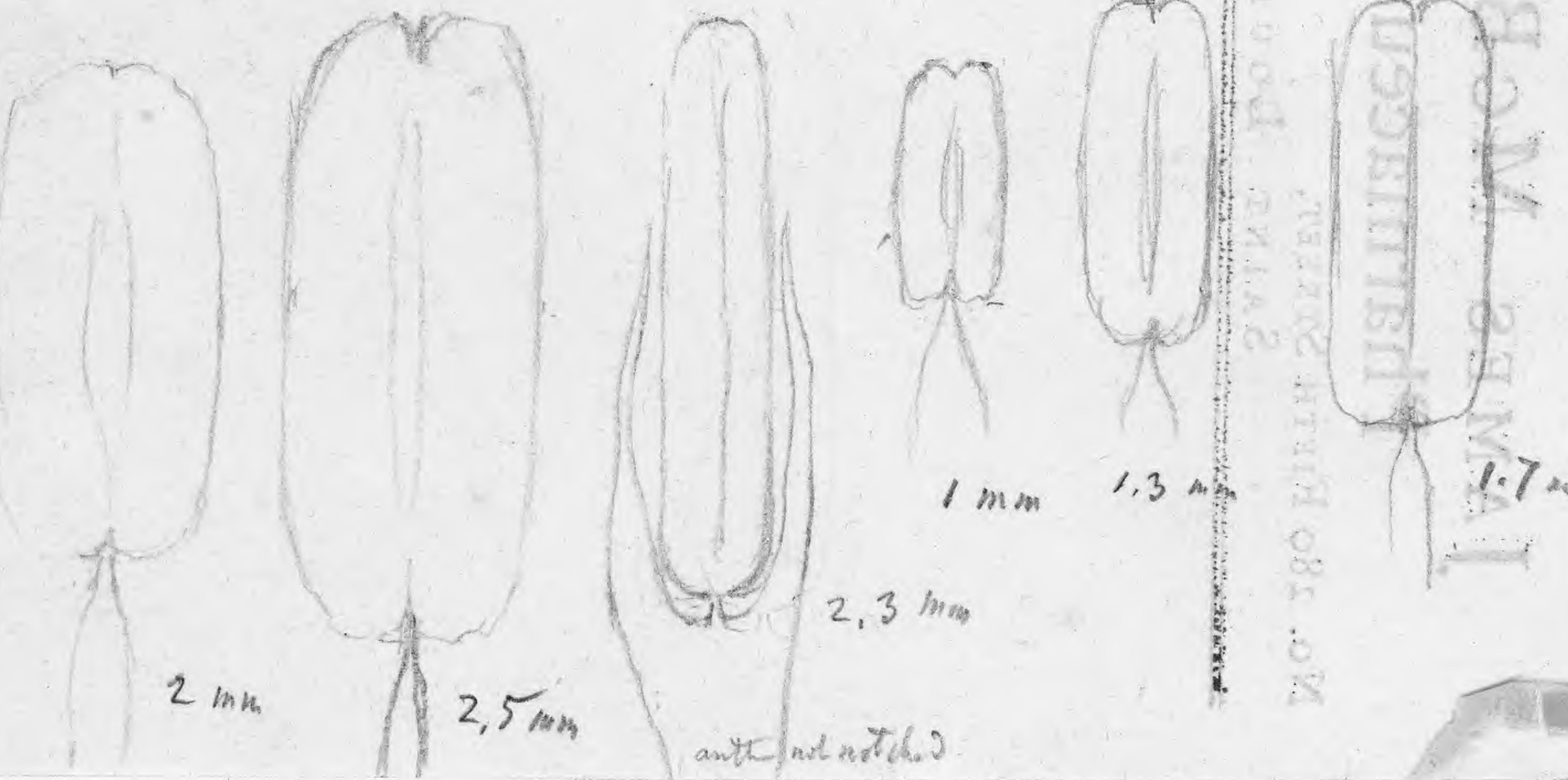
Ia  
1875

0.036



Utah Party  
W. 1874

x20



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Pollen x 415

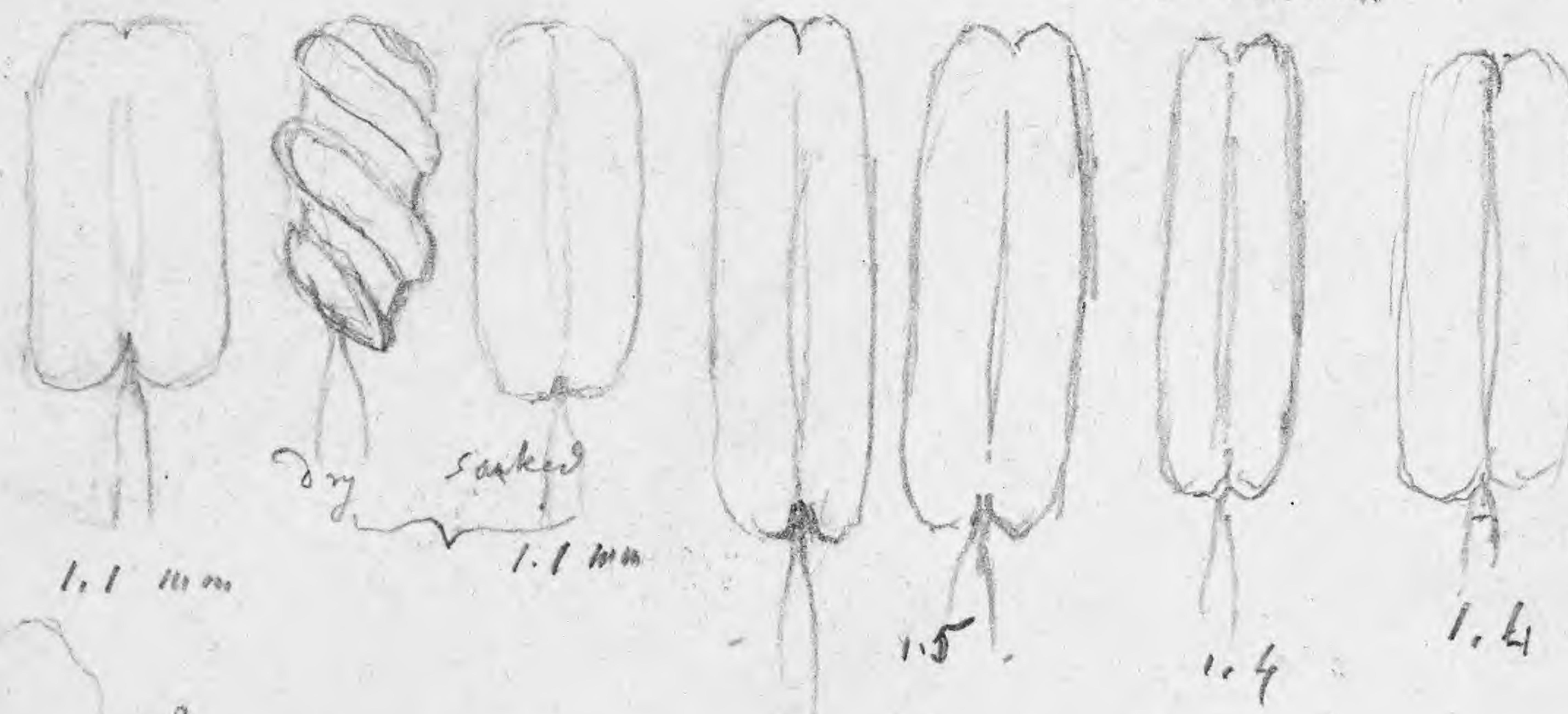
Menzelia Anthers and Pollen

March 2 1882



pumila, Mill. Lindleyi  
Patterson Park cult. short  
anthers x 10

nuda nud  
monilis Tenuis  
multiflora multifl?  
n. Mexicana  
Faulkner 242  
subulata bracts  
Prog. 101



bracts linear



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cm

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*Menfalia* seeds  $\times 10$

March 2 1892

*M. pringlei* Nutt



1.2 mm  
Colorado, Patterson  
Mt. Meeker Park

$\times 150$

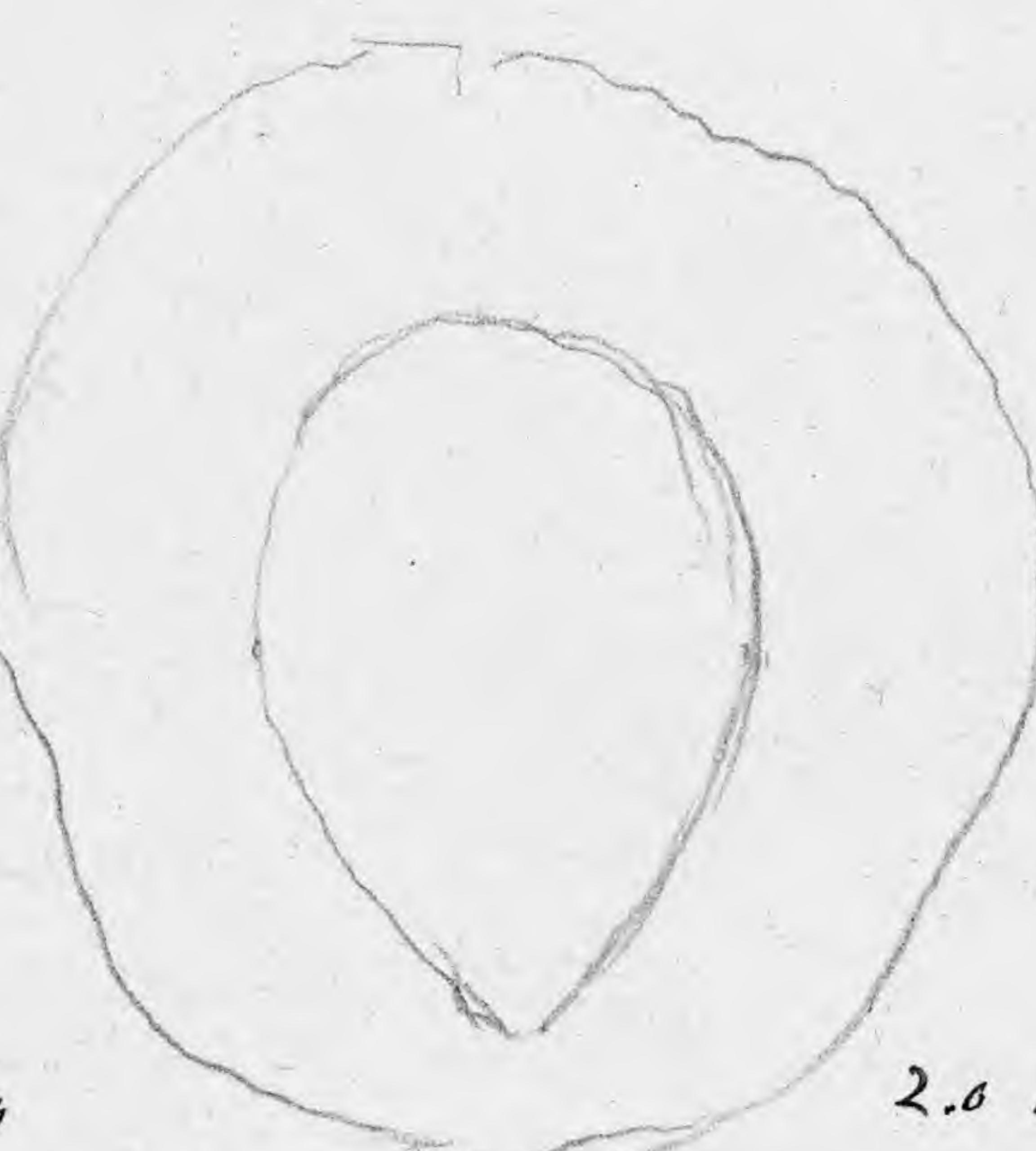


*nuda*

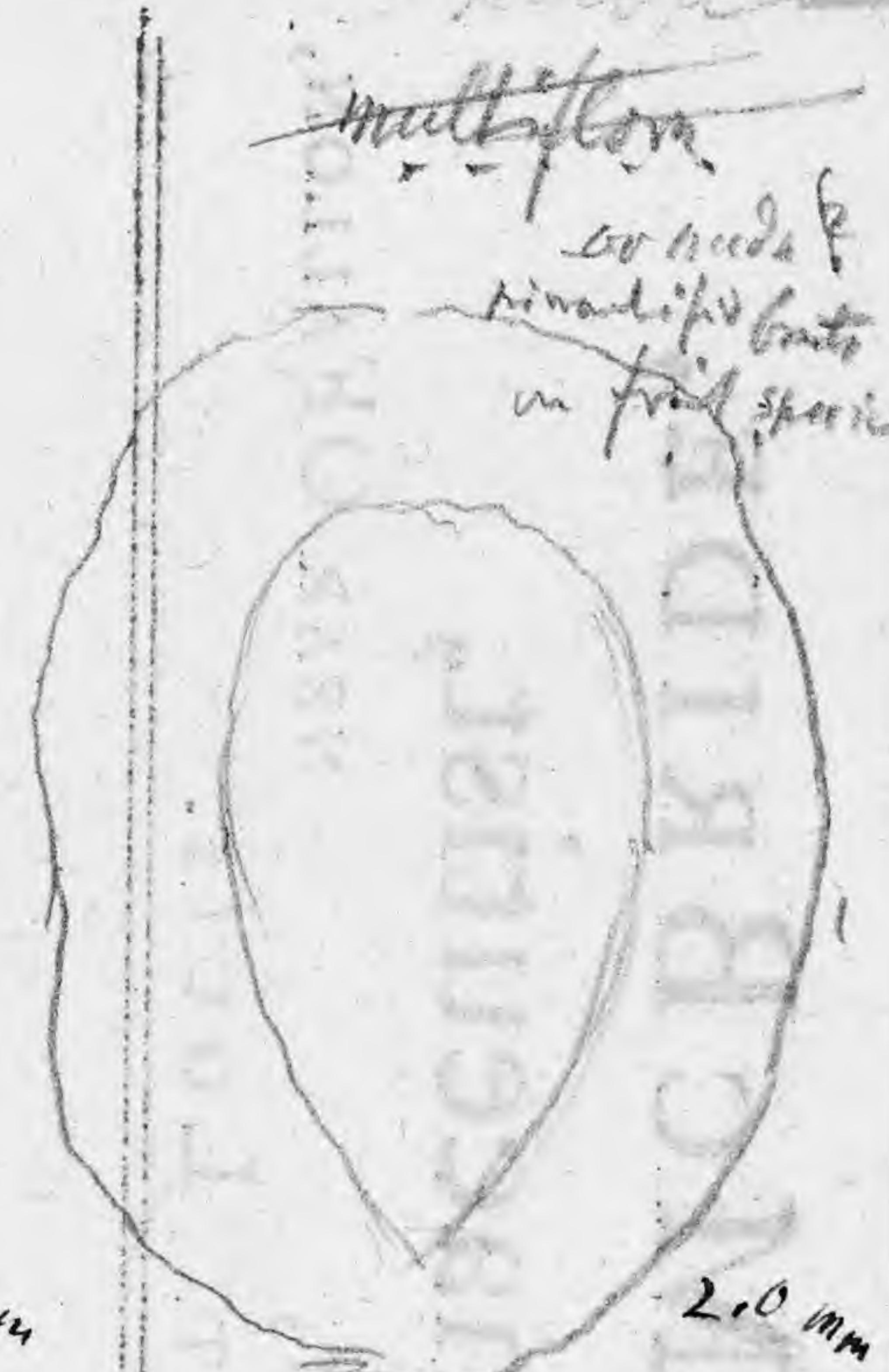


$\times 150$   
*manzanita* Tenu.  
Hayden

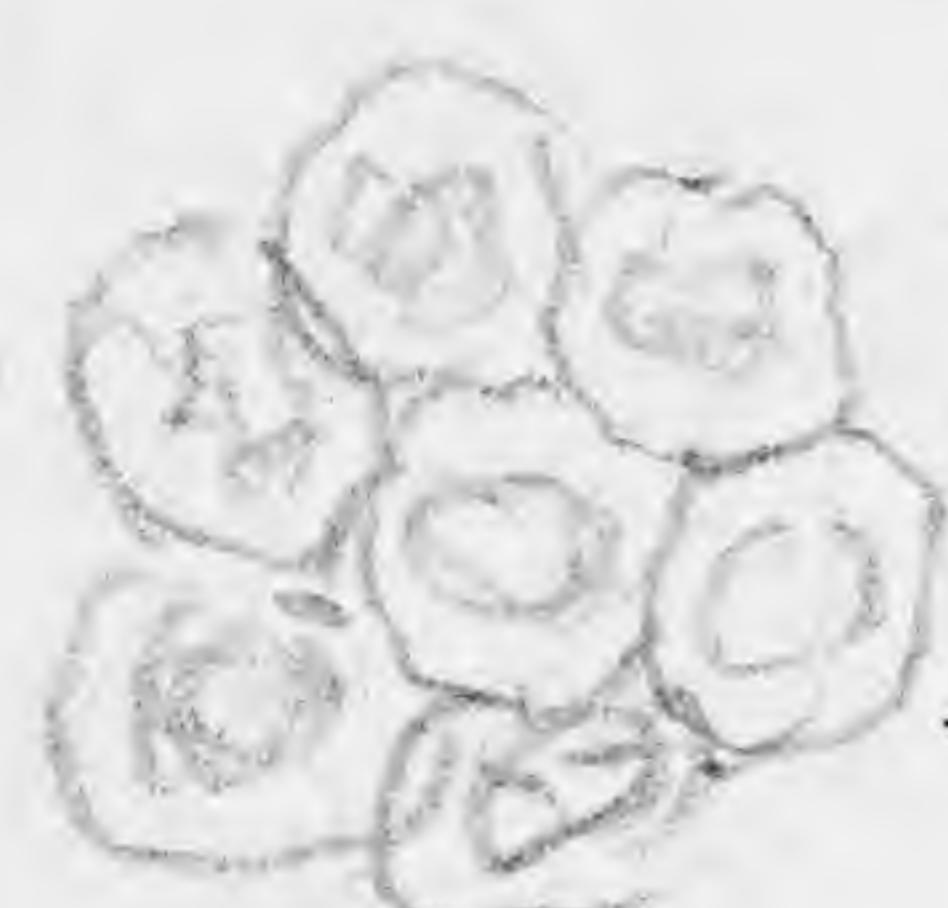
*nuda*



$\times 150$   
*Texas Indigo*



$\times 150$   
Tender N. Mex  
262



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*Mesembryanthemum* seeds X18

March 3' 1882

multi-flora



1.3 mm

*m. multiflora*

M. Wright 213

El Paso  
small form



2.0 mm

mesivo Gregg  
No 50



2.2 mm

mesivo Gregg  
st. 101



X150

mag. of  
seeds of multi



MO. 1882. PUBLISHED BY THE MISSOURI BOTANICAL GARDEN



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Mitchell's Antennaria Pollen Reed

<i>ornata</i>	Antl 2.4 mm - 2.040-45.***	2 mm	narrow wing
<i>laevigata</i>	2.5	0.042	1.7 mm
<i>undulata</i>	2.0	0.043	2 mm
<i>nuda</i> Tex.	1.5	0.030	broad wing
missouri	1.5	0.029	
Cotton City	1.8	0.029	
Texas			2.1
			2.6
<i>milleflora</i> Antl 1.4	0.030	2 -	4
Grape Creek 1.0	0.034	1.5	
var. longifl.	.	1.3	
white grizz. 1.4	0.037	2.0 - 2.2	
<i>chrysanthemum</i>	1-1.3	0.026-27	no wing
<i>pumila</i>	1.1	0.028	narrow wing
yellow	1.3	0.033	rather narrow wing



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many more  
of him for whom I have  
written you before, the  
days when I was  
there and on which  
you were here.  
He is now in St. Louis  
and has been doing  
well and I hope he  
will be here soon.  
All his best regards  
to you and your wife.



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cm

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